

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021001**Date Inspected:** 19-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Qui Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 008342

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 14W. The weld designations reviewed are as follows:

1. DP3169-001-158, 157, 160
2. DP3170-001-221, 219, 218, 216, 215, 114, 164, 214
3. DP3171-001-243, 244, 246, 247, 249, 131, 132, 133, 134
4. DP3171-001-187, 188, 189, 190, 411, 412, 413, 414

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) repair welding of weld joint SEG3020BB-073 located on Bottom Plate to Vertical Shear Plate of OBG Segment 14W. ZPMC Welder is identified as 045246. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable

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WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2752.

SMAW repair welding of weld joint SEG3020BB-037 located on Bottom Plate to Vertical Shear Plate of OBG Segment 14W. ZPMC Welders are identified as 066398 and 067942. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable

WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2752.

SMAW repair welding of weld joint SEG3020BB-019 located on Bottom Plate to Vertical Shear Plate of OBG Segment 14W. ZPMC Welder is identified as 049864. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable

WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2752.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020BB-116 located on Anchor plate to Vertical Shear Plate of OBG Segment 13AW. ZPMC Welder is identified as 066695. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

FCAW welding of weld joint SEG3020BB-117 located on Anchor plate to Vertical Shear Plate of OBG Segment 14W. ZPMC Welder is identified as 067888. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

FCAW welding of weld joint SEG3020BB-110 located on Anchor plate to Vertical Shear Plate of OBG Segment 14W. ZPMC Welder is identified as 201215. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

SMAW welding of weld joint SEG3014C-136, 137 and SEG3014E-154, 155 located on Floor Beam to Corner Assembly of OBG Segment 13BW. ZPMC Welder is identified as 037996. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM.

SMAW welding of weld joint SEG3014G-136, 137 and SEG3014J-154, 155 located on Floor Beam to Corner Assembly of OBG Segment 13BW. ZPMC Welder is identified as 037996. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2211-Tc-U4b-FCM.

SMAW repair welding of weld joint SEG3014S-054 located on Side Plate to K-Plate of OBG Segment 13BW. ZPMC Welder is identified as 045213. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-2G-(2F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20254.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3013K-017, 018 located on Deck panel Diaphragm to Floor Beam at panel point 119-1500 of OBG Segment 13AW. ZPMC Welders are identified as 069469, 068445 and 045240. ZPMC Quality Control (QC) is identified as Mr. Zhang Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

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FCAW welding of weld joint SEG3014C-014 and SEG3014E-014 located on Floor Beam to Corner Assembly of OBG Segment 13BW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

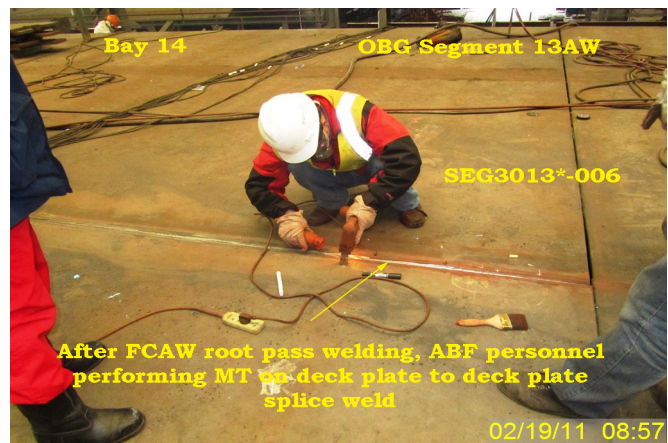
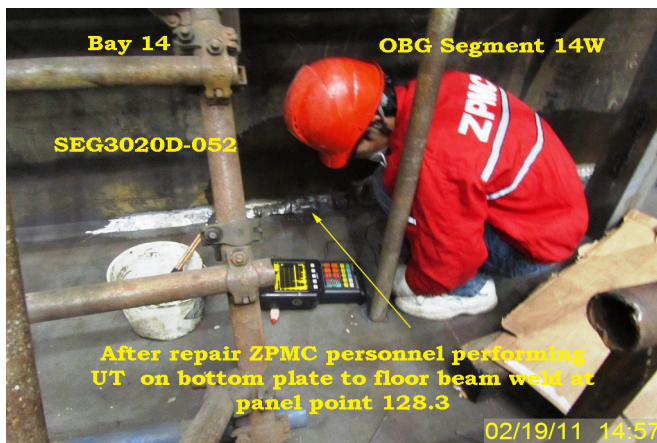
FCAW welding of weld joint SEG3014G-014 and SEG3014J-014 located on Floor Beam to Corner Assembly of OBG Segment 13BW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

FCAW welding of weld joint SEG3013-006 located on Deck Panel to Deck Panel of OBG Segment 13AW. ZPMC Welder is identified as 066734. ZPMC Quality Control (QC) is identified as Mr. Liu Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-223(2)1T-ESAB-1.

This QA inspector observed ZPMC personnel performed Ultrasonic Testing on OBG Segment 14W located on floor beam to bottom plate 'T' joint weld. The weld number is identified as SEG3020D-052 and SEG3020E-056. See the attached pictures.

Sub Merged Arc (SAW) welding of weld joint SEG3013-009 located on deck panel to deck panel splice weld of OBG Segment 13AW. ZPMC Welder is identified as 045270. ZPMC Quality Control (QC) is identified as Mr. Liu Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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Inspected By: Kumar,Vibin

Quality Assurance Inspector

Reviewed By: Patel,Hiranch

QA Reviewer